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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,069	03/01/2002	Lynn G. Hilden	P56668	9121

7590

09/08/2006

Robert E. Bushnell
Suite 300
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Washington, DC 20005

EXAMINER

BERGIN, JAMES S

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,069

Applicant(s)

HILDEN, LYNN G.

Examiner

James S. Bergin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/28/2006 & 6/19/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-67 is/are pending in the application.
- 4a) Of the above claim(s) 33-53, 66 and 67 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 54-65 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 54 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date 9/1/2006
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II, claims 54-65, in the reply filed on 6/19/2006 is acknowledged. The traversal is on the ground(s) that *"the subject matter of the two groups overlap", ... "the mandatory fields of search for the two embodiments are coextensive", and "a lack of burden upon the examining staff on making a simultaneous search of both Groups I and II, and the absence of evidence that Groups I and II are distinct"*.. This is not found persuasive because A) **The inventions are distinct as claimed**, each from the other because of the following reasons:

Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the fuse cord of the **combination (independent claim 54)** does not require that the RDC cord be hermetically sealed within the aluminum tube nor that the aluminum tube be crimped so as to hold the RDC cord in place within the aluminum tube. The **subcombination (independent claim 33)** has separate utility such as in an alternate embodiment of a fuse cord comprising and RDC cord hermetically sealed within a metal tube, either without any surrounding outer tube or with a surrounding rigid outer tube made from a material other than stainless steel, such as a ceramic or a heat resistant synthetic material.

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B) There would be a serious burden on the examiner if the restriction was not imposed because the inventions of Groups I and II each require a different field of search. See MPEP 808.02 (c). The search for group I (the subcombination) would require the formulation of Group I specific search queries not required for Group II, such as those formulated to search for the limitations: an RDC cord hermetically encapsulated in a metal tubing, the tubing being crimped at each end thereof onto a transfer line so as to hold the RDC cord in place. The search for the elected Group II invention required the formulation of group II specific search queries for the limitations: the RDC cord filling an aluminum tube, a surrounding stainless steel tube, each end portion of the stainless steel tube being crimped onto the aluminum tube so as to hold the aluminum tube in place.

Although groups I and II are both properly classified in 102/275.1, the mandatory search for each group is substantially divergent rather than coextensive and would require customized search queries for each inventive group. The search is not confined to 102/275.1, but expands to include 102/275.2, 275.3, 275.4, 275.5, 275.6, 275.7, 275.8, 275.9, 275.11, 275.12, an EAST text search in USPAT, USGPUB, USOCR, JPO, EPO, Derwents Abstracts, C06C005/00.ipc., C006005/04.ipc. and C06C005/06.ipc.. The examiner has now proved that a serious burden would exist to examine both inventions.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 33-53, 66 and 67 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable

generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/19/2006.

Claim Objections

3. Claim 54 is objected to because of the following informalities: in lines 8-9, [wherein **in** inner surface area] should likely be replaced by wherein **an** inner surface area. Appropriate correction is required.

Allowable Subject Matter

4. Claims 54-65 are allowed. The application could be allowed if the non-elected Claims 33-53, 66 and 67 are now canceled by the applicant. The examiner attempted to expedite this matter in a phone interview on 9/1/2206 (attached) but unfortunately agreement was not reached.

5. The following is a statement of reasons for the indication of allowable subject matter: Independent claim 54 claims a transfer line comprising an aluminum tube, a rapid deflagrating material filling the aluminum tube and having a burn rate of 1000 to 1500 feet per second; a semi-flexible stainless steel tube centrally disposed over the aluminum tube and shorter than the aluminum tube, each end portion of the stainless steel tube being crimped onto the aluminum tube to hold the aluminum tube in place, an inner surface area of the non-crimped portion of the stainless steel tube being separated from the aluminum tube by 0.006 inches.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rogers (US 5,223,664); Wilcox et al. (US 5,540,154); Menzel et al. (US 6,435,095 B1); Letendre et al. (US 5,406,889) and Moore et al. (US 5,518,268) .

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Bergin whose telephone number is 571-272-6872. The examiner can normally be reached on Monday - Wednesday and Friday, 8.30 - 5.30.

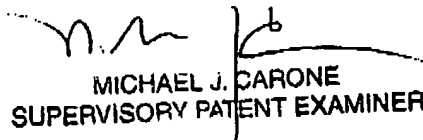
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James S. Bergin


MICHAEL J. CARONE
SUPERVISORY PATENT EXAMINER